



Daniel Kaloyanov

SpecTk 1.6.0

Facility for Rare Isotope Beams, Michigan State University, East Lansing, MI 48824 USA

2024

**MICHIGAN STATE**  
**UNIVERSITY**



U.S. DEPARTMENT OF  
**ENERGY**

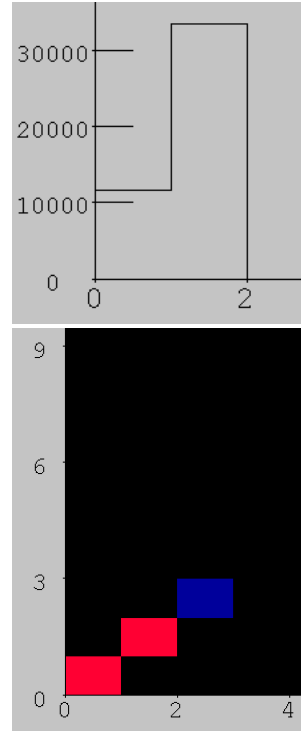
Office of  
Science

# Issues

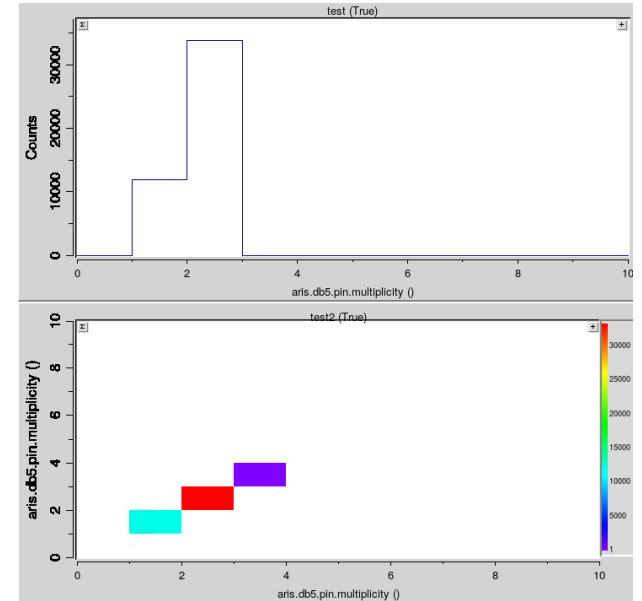
## Issue

- It was discovered that multiplicity differed between SpecTk and Xamine
- Upon Further examination all graphs are different between the two programs
- The issue is caused because when SpecTk get the data from SpecTcl the channel list starts at 1 instead of 0
- Because of the shift SpecTk plots everything one to the right
- Calculated values aren't affected only the the displayed plots

## Xamine



## SpecTk 1.5.1



# Changes

## Remove ROIs

- Added a Remove ROI tool that removes all ROIs present in the config

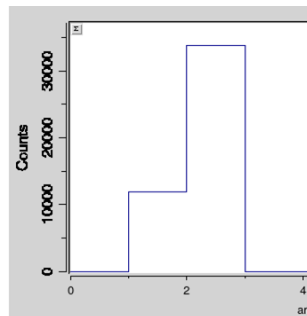
## Plot Changes

- Adjusted how SpecTk reads in the channel list from SpecTcl, so that the plots no longer are shifted to the right by 1 bin.
- No Calculations were affected!

## Future Updates

- Fix the index error at high bin counts
- Possibly address the difference in expectation value and other calculations between Xamine and SpecTk

SpecTk 1.5.1



SpecTk 1.6.0

